



Marked-Up Copy of Claims Amended in Response to the Office Action Dated 27 August 2002

25. (Thrice Amended) The method of claim 18, further comprising isolating the long-term repopulating HSCs from other HPCs using one of an antibody that is specific for a one of an early marker and an antibody that is specific for a late marker.

75. (Amended) The method of claim 18, wherein the HPCs are isolated using a method selected from the group consisting of isolating a cell based on a physical property of the cells cell, and isolating a cell based on a biochemical/biological property.

77. (Amended) The method of claim 25 18, wherein the further comprising isolating the long-term repopulating HSCs from other HPCs using an antibody that is specific for a marker selected from the group consisting of CD34, Thy-1, c-kit receptor, flt3 receptor, AC133, vascular endothelial growth factor receptor I, vascular endothelial growth factor receptor III, Tie1, Tek, basic fibroblast growth factor receptor, CD2, CD3, CD4, CD7, CD8, CD15, CD16, CD19, CD20, CD33, CD38, CD45, CD56, CD71, and glycophorin A.

82. (Amended) The method of claim 77, wherein the long-term repopulating HSCs are isolated from other HPCs by selecting HPCs which do not express a late marker selected from the group consisting of

CD2, CD3, CD4, CD7, CD8, CD15, CD16, CD19, CD20, CD33, CD38, ~~CD45~~, CD56, CD71, and glycophorin A

using an antibody that is specific for the late marker.

86. (Amended) The method of claim 85, wherein the long-term repopulating HSCs are isolated using an antibody that binds specifically with a late marker selected from the

group consisting of CD2, CD3, CD4, CD7, CD8, CD15, CD16, CD19, CD20, CD33, CD38, ~~CD45~~, CD56, CD71, and glycophorin A.

87. (Amended) The method of claim 85, comprising isolating KDR⁺early⁻ cells that do not express any late marker of the group consisting of

CD2, CD3, CD4, CD7, CD8, CD15, CD16, CD19, CD20, CD33, CD38, ~~CD45~~, CD56, CD71, and glycophorin A

from other KDR⁺early⁻ cells.

90. (Amended) The method of claim 89, further comprising separating CD34⁻ cells that do not express a late marker (CD34⁻late⁻ cells) selected from the group consisting of CD2, CD3, CD4, CD7, CD8, CD15, CD16, CD19, CD20, CD33, CD38, ~~CD45~~, CD56, CD71, and glycophorin A on their surface from other CD34⁻ cells, whereby the CD34⁻late⁻ cells are enriched for the HSCs.

97. (Amended) The method of claim 83, wherein CD34⁻ CD38⁻ cells are isolated from the a human hematopoietic tissue.

100. (Amended) The method of claim 99, wherein the CD34⁻ cells do not express any late marker of the group consisting of CD2, CD3, CD4, CD7, CD8, CD15, CD16, CD19, CD20, CD33, CD38, ~~CD45~~, CD56, CD71, and glycophorin A.